

# *E-flex (Maxflex HT)*

*Compliance to Australian &  
New Zealand Standards  
“Solar Hot Water Insulation”*



**AS/NZS2712:2007** Where piping is exposed to the weather, the insulation shall be of a weather-resistant type or surrounded by a weather-resistant enclosure – **FULLY COMPLIANT**

**UV RESISTANCE – Tested to ISO 4892-2:2006** (test report available on request)  
(At the end of the UV exposure time no cracks are present on the surface)

**HEAT RESISTANCE – Tested to ASTM D 537:2004** (test report available on request)  
Laboratory oven tested 160°C for 150 hours  
(At the end of the heat ageing time no cracks are present on the surface)

*thermotec australia Pty Ltd.*  
**Plumbing Industry Commission (PIC Victoria) 98: Solar Installation  
Technical Solution Bulletin 98.01A**

What piping insulation is required?

The regulations require flow and return pipes between the collectors and storage container to be insulated to a minimum R value of 0.3. This is equivalent to 13mm wall thickness closed cell polymer insulation. Depending upon the Climate Region, the R value may need to be increased to 0.6 or 1.0. Refer to Table 8.2 in AS/NZS 3500.4. Thermal insulation materials must be fit for purpose, be capable of withstanding the high temperatures a solar hot water system subjects its pipes to, and where external, appropriately weather resistant and protected from ultra violet degradation

**AS/NZS3500.4 / BCA 2013 volume 2 – minimum material R-value**

Piping located within a ventilated wall space, an enclosed building sub-floor or a roof space.

**Minimum R-value**                      **Zones:1,2,3 & 5 = R0.30**                      **Zones: 4,6 & 7 =R0.45**

Piping located outside the building or in an unenclosed building sub-floor or roof space.

**Minimum R-value**                      **Zones:1,2,3 & 5 = R0.30**                      **Zones: 4,6 & 7 =R0.60**

*Thermotec is certified AS/NZS4859.1: 2002*

*Thermotec is certified AS/NZS2712.2007*

*Thermotec is certified AS/NZS3498 – Watermark*

*Thermotec is Australian owned and operated*



**Thermotec E-flex (Maxflex HT)**

*Material R-value in accordance with AS/NZS4859.1-2002*

Product Code	Size ID	Wall thickness	Material R-value
<a href="#">990130009032</a>	9mm	13mm	R0.66
<a href="#">990130013032</a>	13mm	13mm	R0.60
<a href="#">990130016032</a>	16mm	13mm	R0.56
<a href="#">990130019032</a>	19mm	13mm	R0.54
<a href="#">990130025032</a>	25mm	13mm	R0.51
<a href="#">990130032032</a>	32mm	13mm	R0.48
<a href="#">990130039032</a>	39mm	13mm	R0.46
<a href="#">990190013032</a>	13mm	19mm	R0.97
<a href="#">990130013032</a>	19mm	19mm	R0.87
<a href="#">990130019032</a>	25mm	19mm	R0.81
<a href="#">990190051032</a>	51mm	19mm	R0.69
<a href="#">990250022032</a>	22mm	25mm	R1.18

**Critical Data**

Maximum operating temperature	150° C
Maximum intermittent temperature	180° C
Operating temperature range	-57° C to 150° C
EPDM UV Resistant Material	No external cover/coating needed

IPIQ – The Institute of Plumbing Inspectors Queensland

Thermotec E-flex (Maxflex HT) is an approved Solar HW thermal insulation and is listed on the IPIQ website

**Exceeds BCA Fire Performance requirements – AS/NZS1530.3-1999**

*AWTA Test Report: 7-580134-CO*

REGULATORY INDICES:	Ignitability Index	0	Range 0-20
	Spread of Flame Index	0	Range 0-10
	Heat Evolved Index	0	Range 0-10
	Smoke Developed Index	5	Range 0-10

*Service Life – Providing Thermotec E-flex (Maxflex HT) is installed in accordance to relevant Australian Standards and is operating within the given temperature limits, it is expected that this product will have a life expectancy in excess of 7 years.*

**THERMOTEC PIPE INSULATION LIMITED LIABILITY WARRANTY**

*Thermotec Australia Pty Limited (Thermotec) – ABN 77 003 205 605- supplier of Thermotec E-flex products warrants that the product shall be free of any material defect at time of dispatch from Thermotecs’ manufacturing plant. Under no circumstances will Thermotecs’ liability extend beyond the replacement of product or providing a credit of equivalent value. No consequential loss of any nature whatsoever will apply. In particular, but without limiting the relevant exclusions, Thermotec will not in any circumstances be liable for labour, transport or other costs involved in installing, product removal or replacing any product acknowledged to be defective.*

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